

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
20 January 2005 (20.01.2005)

PCT

(10) International Publication Number
WO 2005/006581 A1

(51) International Patent Classification: H04B 1/30,
H03B 5/32, H03D 11/02

(21) International Application Number:
PCT/IB2004/051022

(22) International Filing Date: 28 June 2004 (28.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03102109.0 11 July 2003 (11.07.2003) HP

(71) Applicant (for all designated States except US): KONIN-
KLIJKE PHILIPS ELECTRONICS N. V. (NL/NL);
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): TOH, Yeow Teng
[SG/DE]; c/o Philips Intellectual Property &, Standards
GmbH Weissshausstr. 2, 52066 Aachen (DE). KWONG,
Kam Choon [MY/DE]; c/o Philips Intellectual Property &,
Standards GmbH Weissshausstr. 2, 52066 Aachen (DE).

(74) Agent: VOLMER, Georg; Philips Intellectual Property
&, Standards GmbH Weissshausstr. 2, 52066 Aachen (DE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

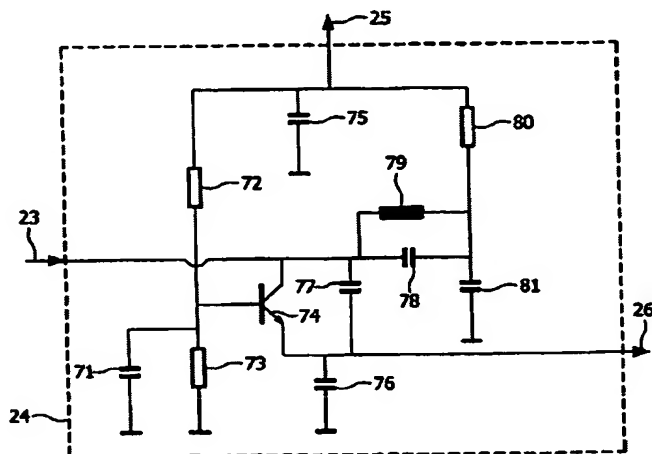
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: REMOTE CONTROL SYSTEM



(57) Abstract: Transmitters (1) of remote control systems are provided with surfaceacoustic-wave-resonators (42) and receivers (2) are provided with variable inductors (54,79) for aligning the receiver, to optimise the performance versus the costs. A receiver oscillating-filtering circuit (24) comprises a single transistor (74), capacitors (76,77) and a variable inductor (79) to create a kind of "filtering" oscillator. A receiver ripple rejecting circuit (25) improves the operation of the receiver oscillating-filtering circuit (24) and of a receiver amplifying circuit (23) comprising a cascade design of two transistors (66,67). A receiver filtering circuit (26) between the receiver oscillatingfiltering circuit (24) and a receiver amplifying-shaping circuit (27) improves the operation of the latter. A transmitter oscillating-amplifying circuit (12) comprises a single power transistor (46) operating as a Colpitts oscillator. The remote control system avoids ceramic-resonators and chokes, and the receiver (2) avoids surfaceacoustic-wave-resonators. Power consumption is minimised.

WO 2005/006581 A1